DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

Adam Babich, Esq.
Tulane Environmental Law Clinic
6329 Freret Street - Room 130B
New Orleans, LA 70118-6231

RE: EnerVest Cooperative Agreement

Dear Adam:

I am pleased to report that DEQ and EnerVest Operating, L.L.C. have executed a cooperative agreement for the assessment and remediation of mercury contamination at sites in the Monroe Gas Field. A copy of the agreement is enclosed.

Please feel free to call me if you have any questions.

Sincerely,

Christopher A. Ratcliff
Attorney Supervisor

Encl.

c: Leonard Kilgore, Esq.
EDMS

OFFICE OF THE SECRETARY
LEGAL AFFAIRS DIVISION
: PO BOX 4302, BATON ROUGE, LA 70821-4302
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COOPERATIVE AGREEMENT FOR AREA OF CONCERN REMEDIATION OF FORMER MERCURY METER MEASURING STATIONS IN LOUISIANA LDEQ AGENCY INTEREST NO. 149272

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The Louisiana Department of Environmental Quality (hereinafter "LDEQ") and EnerVest Operating, L.L.C. (hereinafter "EnerVest"), by the signature of their duly authorized and empowered agents, agree to the terms and conditions of this agreement, which relates to the investigation and remediation of former and current mercury meter measuring stations owned and operated by EnerVest in the Monroe Gas Field in the State of Louisiana.

I. AUTHORITY

1. This Agreement is entered into pursuant to the authority vested to LDEQ under provisions of the "Louisiana Environmental Quality Act", LSA-R.S. 30:2001, *et seq.* The activities conducted pursuant to this Agreement are subject to acceptance by LDEQ.

II. OBJECTIVES

2. The objectives of this Agreement are: (a) to create a programmatic approach for the identification of locations owned, leased, or operated by EnerVest in the Monroe Gas Field, Ouachita, Morehouse and Union Parishes, Louisiana on which mercury meters are located or are known to have been located (hereinafter referred to as "Areas of Concern" or "AOCs"); (b) to investigate the presence of mercury in soils at such locations; (c) to establish the appropriate Remedial Standard(s) and Management Option(s) under the requirements found in the Louisiana Administrative Code ("LAC") 33:I, Chapter 13, the Risk Evaluation/Corrective Action Program (hereinafter RECAP); and (d) to remediate confirmed releases at such locations.

3. In entering into this Agreement, it is the mutual objective of LDEQ and EnerVest that EnerVest's on-going inspection program of all operating mercury meters be continued on a systematic basis to detect any releases of mercury to the environment and that EnerVest maintain records of such inspections.

III. BACKGROUND INFORMATION

4. EnerVest operates natural gas wells and gathering facilities in the Monroe Gas Field. As part of these operations, orifice type metering equipment is used to measure volumes of natural gas. The orifice equipment utilizes an internal flow restrictive orifice plate that creates a pressure differential across the orifice. A number of the meters historically employed or currently employ a mercury manometer to measure the volume of natural gas being produced or gathered. The potential exists for elemental mercury

from these meters to have been released from the meters by various means potentially affecting the surrounding environment.

5. EnerVest represents that:

a. The AOCs are comprised of numerous metering locations of less than one-half (1/2) acres each, located within the Monroe Gas Field.

b. EnerVest currently operates approximately 4,100 wells in the Monroe Gas Field, of which approximately 385 have active mercury meters.

c. Between 1996-2000, EnerVest and its predecessor in title removed approximately 300 mercury meters were removed.

d. Since its first acquisition of the wells and gathering facilities in the Monroe Gas Field in 1998, EnerVest has been engaged in an inspection and maintenance program to detect and abate mercury releases. Currently, EnerVest believes that none of its mercury meters are leaking.

e. Between September, 2006 and January 17, 2007, EnerVest has removed 403 mercury meters.

f. In total, since 1996, 5097 lbs. of mercury contained in the meters have been removed and recycled and/or disposed of in accordance with applicable regulations. In addition, approximately 250,000 lbs. of contaminated or potentially contaminated soil has been removed from the environment and properly disposed of in accordance with applicable regulations.

IV. WORK TO BE PERFORMED

6. It is hereby AGREED that:

a. Within thirty (30) days of the effective date of this Agreement, EnerVest will provide to LDEQ: (i) a map showing the location of all sites owned, leased, and/or operated by EnerVest in the Monroe Gas Field on which mercury meters are located or are known by EnerVest to have been located; and (ii) a list of all such sites with latitude and longitude coordinates for each site. The map and list will be revised on, at least, an annual basis to reflect removal and replacement of mercury meters, and the discovery, acquisitions, and alienations of sites during the previous calendar year.

b. Within thirty (30) days of the approval by LDEQ of the Investigation and Remediation Work Plan for Former Mercury Meter Sites, dated March 20, 2007 (the "Work Plan") attached as Exhibit "1", EnerVest will submit to

LDEQ a list of the AOCs that EnerVest plans to address in the first twelve months of this agreement, and begin implementation of the Work Plan in accordance with the schedule set forth in section IV.e., below. On or before March 1 of 2009 and each calendar year thereafter, EnerVest will submit to LDEQ a list of the AOCs that EnerVest plans to address in the next twelve months.

c. EnerVest will submit an Annual Closure Report(s), as required in the Work Plan, on or before March 1 of each calendar year for LDEQ approval of the completion of all work conducted in accordance with the Work Plan for all AOCs remediated in the previous calendar year in accordance with the schedule in section IV.e., of this Agreement. In the interest of expediency, EnerVest may, at its discretion, submit a Closure Report(s) for a subset of the AOCs that have been properly closed prior to the completion of the calendar year.

d. In the event that EnerVest elects or is required to manage an AOC under any Risk Evaluation/Corrective Action Program ("RECAP") Option other than a cleanup to the RECAP screening standards for soil, EnerVest shall have an additional forty-five (45) calendar days to submit an AOC Specific Investigation Report or work plan that addresses other RECAP Options for that AOC.

e. EnerVest will replace or remove a minimum of forty/year (40) mercury meters in each twelve-month period or a total of eighty (80) meters over a two (2) year period, until such time as all mercury meters in operation by EnerVest are removed, unless otherwise authorized by LDEQ. EnerVest will place priority on the removal of mercury meters in locations subject to seasonal or frequent flooding to the extent reasonably practical depending on site conditions, weather and access.

f. EnerVest will investigate and remediate, as necessary, each of the AOCs from which mercury meters have been or will be removed as of the effective date of this agreement, in accordance with the approved Work Plan. EnerVest shall address a minimum of eighty (80) such AOCs in each twelve-month period, or a total of one-hundred sixty (160) AOCs over a two (2) year period, until such time as all such AOCs owned or operated by EnerVest are addressed, unless otherwise authorized by LDEQ. EnerVest will place priority on addressing AOCs in locations subject to seasonal or frequent flooding to the extent reasonably practical depending on site conditions, weather and access.

g. All Mercury Meters which are removed shall be removed and decommissioned in accordance with the Monroe Field Mercury Meter Procedures, attached as Exhibit 2. EnerVest will continue to conduct a

program of meter inspections designed to detect any releases of mercury from the meters; will notify LDEQ of releases in accordance with LAC 33:I, Chapter 39; will repair or remove any leaky meters; will promptly vacuum or otherwise collect all visible mercury which may be present at such location; and will properly collect, store and recycle or dispose of any mercury recovered all in accordance with the Mercury Meter Procedures. EnerVest shall maintain at its office and make available to LDEQ for inspection a record of its inspection program.

V. QUALIFIED PROFESSIONALS

7. All work performed pursuant to this Agreement shall be under the direction and supervision of a qualified professional with expertise in environmental site investigation, risk evaluation and/or remediation. Prior to the initiation of work under this Agreement EnerVest shall notify LDEQ in writing regarding the name, title, and qualifications of such professionals and any contractors and/or principal subcontractors to be used in carrying out the terms of this Agreement.

VI. DESIGNATED PROJECT MANAGERS

8. Within fifteen (15) calendar days after the effective date of this Agreement, LDEQ and EnerVest shall each designate a Project Manager ("PM"). Each party will notify the other in writing if it changes its PM. Each Project Manager shall be responsible for overseeing the implementation of this Agreement. To the maximum extent possible, communications between EnerVest and LDEQ and all documents, including work plans, reports, and correspondence, shall be directed through the PMs, as appropriate.

9. The responsibility of the LDEQ PM or their representative will be to observe and review all aspects of the work of the remediation contractor to ensure that all work is performed in accordance with the Work Plan, this Agreement, the Louisiana Environmental Quality Act (LSA R.S. 30:2001 *et seq.*), RECAP, and all applicable regulations.

10. The LDEQ Secretary or his designee shall have the authority to halt, conduct or direct any tasks required by this Agreement and/or any response actions or portions thereof when conditions present an immediate risk to public health or welfare or the environment.

VII. REPORTING

11. LDEQ shall review and, as necessary, provide approval of or written comments on all Closure Reports prepared by EnerVest. LDEQ will endeavor to notify EnerVest in writing of LDEQ's approval or comments on these documents or any part thereof within sixty (60) calendar days of receipt of the document. Within thirty (30) calendar days of

receipt of such comments, EnerVest shall either amend and submit to LDEQ the revised Report(s) or notify LDEQ in writing of the reasons for not adopting LDEQ's revisions. In the event that LDEQ is not satisfied that the revisions are responsive to the LDEQ comments, LDEQ may either elaborate on the comments or issue a notice of non-acceptance.

12. Within thirty (30) days after approval of any Annual Closure Report, LDEQ shall grant a "no further action at this time" ("NFA-ATT") determination (as per RECAP) or, when applicable, a Certificate of Completion (as per La. R.S. § 30:2287.1) for all AOCs covered in the Annual Closure Report(s).

13. The time periods for action provided in Section IV (Work to be Performed) and this section may be extended by written mutual consent of the LDEQ and EnerVest.

VIII. LABORATORY DATA QA/QC

14. Analytical results may not be accepted at face value. The Work Plan specifies procedures for laboratory data quality assurance/quality control (QA/QC) and requires that all data be evaluated with respect to analytical method, sample quantitation limits, data qualifiers and codes, and blank sample results. EnerVest shall make recommendations in the data evaluation section of the Closure Report(s) regarding the usability of the data. Data determined not to be acceptable shall be identified and justification for determination shall be given. The Work Plan also provides for the development of a data management system including field logs, sample management and tracking procedures, and document control and inventory procedures for both laboratory data and field measurements to endure that the collective data is of adequate quality and quantity. EnerVest will ensure that collected data has been validated at the appropriate field or laboratory QA/QC level to determine whether it is appropriate for its intended use. Validation shall include such procedures to assess data precision, representativeness, comparability, accuracy and completeness of specific measurement parameters.

15. A summary of all analytical data shall be submitted to the LDEQ with each Closure Report. If requested, EnerVest shall provide LDEQ with a fully supported data package within twenty (20) days of receipt of the request.

IX. SAMPLING/ANALYSIS, ACCESS AND DATA AVAILABILITY

16. Upon request, EnerVest shall make available to LDEQ the results of all sampling and/or tests or other data generated for each AOC by EnerVest in implementing this Agreement. Accordingly, all such data may be reviewed and inspected by LDEQ at the following location: EnerVest Operating, L.L.C., 178 Lee Morgan road, Fairbanks, Louisiana 71240-0219; telephone (318) 665-4506. Upon written request by LDEQ, EnerVest shall submit any data to LDEQ within ten (10) calendar days.

17. LDEQ shall make available to EnerVest the results of sampling and/or tests or other data generated by LDEQ for AOCs covered by this Agreement, with the exception of any documents or information that are declared confidential by the Secretary of DEQ in accordance with La. R.S. 30:2030.

18. EnerVest shall notify LDEQ not less than five (5) business days in advance of any planned AOC sample collection activity and as soon as possible of any unplanned or emergency AOC sample collection activity. Such notification of the AOC sampling schedule may be made for all or a subset of the AOCs at one time. If any changes occur to the sampling schedule, EnerVest must notify LDEQ of said changes as soon as practicable. At the request of LDEQ, EnerVest shall allow split or duplicate samples to be taken by LDEQ and/or its authorized representatives of any AOC samples collected by EnerVest, or on EnerVest's behalf, pursuant to the implementation of this Agreement.

19. LDEQ shall notify EnerVest not less than five (5) business days in advance of any planned sample collection activity and as soon as possible of any unplanned or emergency sample collection activity. At the request of EnerVest, LDEQ shall allow split or duplicate samples to be taken by EnerVest of any samples collected by LDEQ during the performance of the work associated with this Agreement.

X. AOC ACCESS AND DOCUMENT AVAILABILITY

20. EnerVest shall notify LDEQ at least three (3) working days prior to the initiation of any soil remediation field work. EnerVest shall grant LDEQ open access to the AOCs and provide LDEQ with an opportunity to observe all soil remediation field work pertaining to the performance of the Work Plan. LDEQ and/or any LDEQ authorized representative shall have the authority to enter and freely move about all property that comprises the AOC for any purpose authorized by law, which includes but is not limited to: inspecting records, operating logs, and contracts related to the AOC's mercury metering station; reviewing the progress in carrying out the terms of this Agreement; conducting such tests as LDEQ or the LDEQ PM deem necessary; using camera, sound recording or other documentary type equipment necessary to record or document the activities relating to the remediation of the AOC; and verifying the data submitted to LDEQ by EnerVest. When possible, LDEQ shall give EnerVest reasonable notice before entry. EnerVest shall permit LDEQ's authorized representatives, at LDEQ's cost, to inspect and copy all records, files, photographs, documents and other writings, including all sampling and monitoring data, in any way pertaining to work undertaken pursuant to this Agreement. All parties with access to the AOC pursuant to this paragraph shall comply with the project health and safety plan.

21. If any third party access agreements are necessary for the implementation of this Agreement EnerVest shall use reasonable efforts to obtain such access agreements as soon as practicable. If, despite reasonable efforts, EnerVest is unable to obtain a necessary third party access agreement, EnerVest shall so advise LDEQ and LDEQ agrees to assist in obtaining any said third party access agreements. Such agreements

shall provide for access by LDEQ and/or its authorized representatives to the land subject to the access agreements. Failure by EnerVest to obtain access agreements, after use of such reasonable efforts, does not constitute a breach of this Agreement and shall qualify as a force majeure event pursuant to Section XXI, (Force Majeure) and the affected work at the AOC will be delayed until the appropriate third party access agreement is obtained.

XI. CHANGING AOC CONDITIONS

22. If conditions or circumstances at the AOC materially change during performance of the work specified under this Agreement, LDEQ and/or EnerVest may determine that additional, different, or fewer tasks, such as further investigation work, engineering evaluation and technology, or remedial actions, are necessary. The party discovering such findings shall, as soon as practicable, notify the other party. Within thirty (30) calendar days of receipt of such notice, each party will notify the other as to whether or not the Agreement or Work Plan needs to be modified to accommodate changing site conditions or circumstances. Upon written agreement of the parties thereto, this Agreement or Work Plan may be modified as necessary to address such changing site conditions or circumstances. If the parties do not agree to the inclusion of these tasks, the parties shall proceed in accordance with Section XV (Dispute Resolution) provisions.

XII. PROGRESS REPORTS AND SCHEDULE

23. During periods of AOC site activity covered under this Agreement, EnerVest shall provide written progress reports to LDEQ quarterly. At a minimum, these progress reports shall: (a) provide a summary of all data gathering and planning; (b) contain a status report on all field activities; and (c) include a projected schedule and list of sites to be addressed in the next quarter. If requested by LDEQ, EnerVest shall also include all results from sampling and analysis and all other data as required by RECAP and received by EnerVest pertinent to any work performed at the AOCs.

XIII. RECORD PRESERVATION

24. LDEQ and EnerVest agree that they shall preserve, despite any document retention policy to the contrary, all records and documents in their possession or in the possession of their divisions, employees, agents or contractors which are pertinent in any way to work undertaken pursuant to this Agreement at the AOCs. Documents previously supplied to LDEQ may be excluded. This shall not apply to attorney work-product or attorney-client privileged documents.

25. One copy of these documents shall be retained during the course of implementing the work under this Agreement and for a minimum of three (3) years after the termination of this Agreement pursuant to Section XXVI (Termination and Satisfaction) After the aforementioned three (3) year period, EnerVest shall make available to LDEQ such records or copies of such records, except those which are attorney work-product or subject

to the attorney-client privilege. If LDEQ declines to take possession of any such records, EnerVest, in its discretion, may destroy or otherwise dispose of such records.

XIV. OFFICIAL ADDRESSES OF THE PARTIES

26. All correspondence and other documents to be submitted pursuant to this Agreement shall be sent to the following addresses or to such other addresses as EnerVest or LDEQ hereafter may designate in writing:

On behalf of the LDEQ:

Administrator
Remediation Services Division
Department of Environmental quality
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

*All Work Plan(s) and reports shall be submitted in triplicate and in electronic format to LDEQ.

On behalf of the EnerVest Operating, L.L.C.:

Jimmy E. Pardue
District Manager
EnerVest Operating, L.L.C.
Post Office Box 219
Fairbanks, LA 71240-0219
Telephone: (318) 665-4506, ext. 212
Facsimile: (318) 665-4612
Jpardue@enervestllc.com

XV. DISPUTE RESOLUTION

27. If EnerVest objects to any LDEQ written notice of non-acceptance or decision made pursuant to this Agreement, EnerVest shall notify LDEQ in writing of its objection within ten (10) calendar days of receipt of such notice or decision. LDEQ and EnerVest shall then have an additional thirty (30) calendar days from the receipt by LDEQ of the notification of objection to reach an agreement. If an agreement cannot be reached on any issue within this thirty (30) calendar day period, LDEQ shall provide a written statement of its decision by certified mail to EnerVest within ten (10) calendar days of the expiration of the period to reach agreement. If EnerVest objects to LDEQ's decision, it shall notify LDEQ of its objections, in writing, within twenty (20) calendar days after receipt of LDEQ's written statement of its decision, exclusive of date of receipt, and may request a hearing with the LDEQ Secretary or his designee. If the request for hearing is granted, the issues raised in the request shall be set for hearing before a hearing officer.

the hearing officer will render recommendations to the Secretary or his designee. The final decision by the Secretary or his designee after this hearing is Final Agency Action for the purpose of judicial review. In the event EnerVest fails to object to a LDEQ written notice of non-acceptance or decision made pursuant to this Agreement, EnerVest will be bound by such written notice of non-acceptance or decision unless EnerVest elects to terminate the Agreement pursuant to Section XXVI (Termination and Satisfaction).

28. If this section is invoked with respect to a particular matter, all other work not directly affected thereby shall proceed according to the agreed upon schedule.

XVI. COVENANT NOT TO SUE

29. LDEQ shall not institute suit or otherwise pursue claims against EnerVest, its parent, successors, or assigns relating to the work agreed to in this Agreement so long as EnerVest complies with this Agreement. Failure to comply will be deemed to have occurred after notice by LDEQ of such non-compliance and failure by EnerVest to correct such non-compliance, subject to the provisions of Section XV, (Dispute Resolution), above. In the event there is a failure to comply with this Agreement, and subject to Section XV (Dispute Resolution), LDEQ may take any action specified in Section XVII (Reservation of Rights).

30. Notwithstanding any other provision of this Agreement to the contrary, LDEQ reserves the right to assert claims against EnerVest where (i) conditions that were unknown to the LDEQ on or before NFA-ATT determination are discovered that are resulting in releases of hazardous substances from an AOC(s) at levels posing an imminent and substantial endangerment to human health or the environment, or (ii) new information is received by LDEQ regarding an imminent and substantial endangerment to human health or the environment resulting from releases of hazardous substances from an AOC(s).

31. Nothing herein shall preclude the parties from pursuing their rights and remedies under Section XVII (Reservation of Rights) herein.

XVII. RESERVATION OF RIGHTS

32. Notwithstanding compliance with the terms of this Agreement, EnerVest is not released from liability, if any, for any matters outside the scope of this Agreement.

33. Except as expressly provided in Section XVI (Covenant Not To Sue) of this Agreement, LDEQ reserves the right to take any action or pursue any available remedy pursuant to any legal authority, including the right to seek compliance, injunctive relief and monetary penalties for any breach of law, regulations, or this Agreement.

34. EnerVest and LDEQ expressly reserve all rights and defenses that they may have, including LDEQ's right, for good cause shown, both to not accept work performed by EnerVest which fails to meet the terms of this Agreement and to request that EnerVest perform tasks in addition to those detailed in the Work Plan.

35. In the event that EnerVest declines to perform any reasonable request to perform additional and /or modified tasks, including but not limited to those developed pursuant to Section IV (Work To Be Performed), which under Section XV (Dispute Resolution) has been determined reasonable, LDEQ reserves the right to undertake any such additional and/or modified task and to seek from EnerVest or other responsible parties recovery and/or reimbursement for any costs or expenses incurred in undertaking any such additional and/or modified tasks and any damages, including treble damages, allowed by law.

36. EnerVest reserves all rights that it has or may have to assert claims against persons or entities, for matters arising out of the AOC or its operation and ownership, including, but not limited to, claims for breach of contact, indemnity, contribution, nuisance and claims under federal, state and local laws. Pursuant to La. R.S. 30:2276(G), EnerVest further reserves its right to seek contribution for or reimbursement of any costs incurred in implementing this Agreement.

XVIII. NO ADMISSION OF LIABILITY

37. Neither EnerVest's agreement to perform, nor its performance of, the Work described herein shall be admissible in any judicial or administrative proceeding brought by or on behalf of LDEQ or any other party as proof of liability or an admission of any fact dealt with herein or incorporated by reference herein. Moreover, neither anything contained herein nor participation in this process shall constitute an admission of liability of the violation of any statute, regulation, ordinance or law or responsibility for any activities regarding the AOCs.

38. Neither this Agreement nor the fact of participation of any party in this process shall be admitted as evidence of any admission or as a declaration against interest by EnerVest in any proceeding. This Agreement may be admitted as evidence of its terms in any proceeding instituted by the parties to enforce this Agreement.

39. It is expressly agreed and stipulated by the parties that this Agreement is entered in settlement and compromise, in recognition of the potential risks and expense of litigation.

XIX. SUSPENSION OF PRESCRIPTION

40. It is expressly agreed and stipulated by the parties that the prescriptive period set forth in La. R.S. 30:2276(H) is suspended while this Agreement is in effect. The time period while this Agreement is in effect shall not be included in computing the time

provided by La. R.S. 30:2276(H) for any cause of action arising under Chapter 12 of the Environmental Quality Act concerning the AOC. The suspension of prescription provided for herein is only effective between the parties hereto.

XX. PUBLIC PARTICIPATION

41. EnerVest agrees to prepare and submit for LDEQ approval a Public Participation Plan in accordance with LAC 33:VI. §803 designed to inform citizens of site plans and activities, as well as provide opportunity for citizen input. EnerVest shall be responsible for all Public Participation costs and shall be responsible for implementation of the plan under LDEQ supervision.

XXI. REIMBURSEMENT OF OVERSIGHT COSTS

42. LDEQ may employ, arrange for, or contract with a qualified person to perform oversight tasks related to the work performed under this Agreement. EnerVest shall bear reasonable and necessary costs, both past and ongoing, incurred by LDEQ in connection with this Agreement and as allowed by law. Such qualified person shall keep accurate books and accounts of oversight costs. Such books and accounts may be audited by EnerVest upon written request.

43. Annually from the date of this signed Agreement, LDEQ shall submit to EnerVest an accounting of oversight costs incurred by LDEQ with respect to this Agreement.

44. If EnerVest disagrees with this accounting on the basis that costs incurred by LDEQ are not reasonable, not necessary or excessive, then EnerVest may invoke Section XV (Dispute Resolution) of this Agreement. EnerVest shall, within thirty (30) calendar days of the invoice date, unless it has invoked Section XV (Dispute Resolution) before this thirty (30) calendar day period has passed, remit a check for the amount of those costs made payable to the Louisiana Department of Environmental Quality. Checks shall specifically reference the LDEQ invoice number, and be mailed to the following address:

Accountant Administrator
Financial Services Division, Office of Management and Finance
Louisiana Department of Environmental Quality
Post Office Box 4303
Baton Rouge, Louisiana 70821-4303

A copy of this transmittal shall be mailed to:

Cost Recovery Officer
Office of Environmental Assessment
Remediation Services Division
Louisiana Department of environmental Quality

Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

45. LDEQ reserves the right to bring an action against any responsible party not a participant to this agreement pursuant to LSA-R.S. 30:2271 *et seq.* and CERCLA for recovery of any costs incurred by LDEQ related to this Agreement and not reimbursed by EnerVest. LDEQ reserves the right to bring an action against any responsible party pursuant to LSA-R.S. 30:2271 *et seq.* and CERCLA for recovery of any other past and future costs incurred by LDEQ in connection with activities conducted pursuant to state law or CRCLA at the AOCs.

XXII. FORCE MAJEURE

46. EnerVest shall be excused from performing the activities called for in the Work Plan, within the time limits and in the manner specified in the schedules included in the Work Plan, if such performance is prevented or delayed by circumstances which constitute *force majeure*. For purposes of this Agreement, *force majeure* is any circumstance including weather, acts of God, and other circumstances arising from causes beyond EnerVest's reasonable control despite EnerVest's due diligence and good faith efforts. In the event of *force majeure*, the time for performance of any activity delayed by the *force majeure* shall be extended for the time period of the delay attributable to the *force majeure* event and the time for performance of any activity dependent upon the delayed activity shall be similarly extended.

47. EnerVest shall notify LDEQ in writing as soon as reasonably possible but not later than fifteen (15) calendar days after EnerVest becomes aware of a circumstance which may delay or prevent (or has delayed or prevented) performance of any activity under the Work Plan. The notice shall state the cause and anticipated length of the delay, the measures taken by EnerVest to prevent or minimize such delay, and a timetable outlining when such measures were or will be taken.

48. If the parties do not agree as to whether or not the event(s) constitute(s) *force majeure*, or as the length of the delay attributable to the *force majeure*, the dispute shall be resolved in accordance with the provisions of Section XV (Dispute Resolution).

XXIII. OTHER CLAIMS

49. Nothing in this Agreement shall constitute or be construed as a release of or from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or related in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or take from any AOC.

XXIV. OTHER APPLICABLE LAWS

50. All actions required to be taken pursuant to this Agreement shall be undertaken in accordance with requirements of all applicable local, state, and federal laws and regulations unless an exemption from such requirements is specifically provided in this Agreement.

51. Notwithstanding the foregoing, this Agreement shall be interpreted and construed in accordance with the laws of the State of Louisiana.

XXV. INDEMNIFICATION

52. EnerVest agrees to indemnify, save and hold the State of Louisiana, its agencies, departments, agents and employees, harmless from any and all claims or causes of action arising from or on account of negligent acts or omissions of EnerVest, its officers, employees, receivers, trustees, agents or assigns, in carrying out the activities and performing work at the AOCs pursuant to this Agreement. This indemnity does not extend to the liability, if any, of the state or any agency, department, officers, employees, agents, institution or political subdivision thereof as a generator or otherwise under LSA-R.S. 30:2271 *et seq.* or any other federal or state law prior to the effective date of this Agreement.

53. This indemnity does not extend to claims or causes of action arising from or on account of acts or omissions of LDEQ, its employees, or contractor, performing work at the AOCs.

XXVI. EFFECTIVE DATE AND AMENDMENTS

54. This Agreement may be executed in counterparts and becomes effective on the date of the final signature.

55. This Agreement may only be amended by mutual agreement of LDEQ and EnerVest. Such amendments shall be in writing and shall have as the effective date, that date of which such amendments are signed by the Secretary of LDEQ or his designee. No informal advice, guidance, suggestions, or comments by LDEQ regarding reports, plans, specifications, schedules, and any other writing submitted by EnerVest will be construed as relieving EnerVest of its obligations to obtain such formal acceptance as may be required by this Agreement. Any reports, plans, specifications, schedules and attachments required by this Agreement are, upon acceptance by LDEQ, incorporated into this Agreement.

XXVII. TERMINATION AND SATISFACTION

56. This Agreement shall be deemed satisfied and terminated upon EnerVest's receipt of written notice from LDEQ that EnerVest has demonstrated to the satisfaction of LDEQ that all of the tasks of this Agreement, including any additional tasks which EnerVest has agreed

to be necessary, have been completed. If the work has been completed to the satisfaction of LDEQ then LDEQ shall issue an appropriate written notice of satisfaction and termination of this Agreement not later than sixty (60) calendar days after completion of all tasks under this Agreement.

57. Nothing contained in this Agreement shall limit the ability of EnerVest to sell, transfer, convey or assign the EnerVest facilities in the Monroe Gas Field, including the right of EnerVest to assign its obligations under the Agreement; provided however, that no such sale, transfer, conveyance or assignment shall release EnerVest of its obligations under the Agreement unless approved by LDEQ.

XXVIII. PARTIES BOUND

58. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the party represented in this document.

59. This Agreement shall apply to and be binding upon EnerVest and LDEQ, their agents, successors and assigns and upon all persons, contractors, and consultants acting under, or for EnerVest or LDEQ.

IT IS SO AGREED AND ORDERED:

BY: Wilbert Jordan
Wilbert F. Jordan
Assistant Secretary
Office of Environmental Assessment
Department of Environmental Quality

WITNESS:

Karen K. Cantrearg
(signature)
Karen K. Cantrearg
(printed)

Thomas F. Harris
(signature)
Thomas F. Harris
(printed)

SWORN TO AND SUBSCRIBED, before me in the presence of the above witnesses, the undersigned Notary Public, on the 31 day of January, 2008.

Notary Public (signature)

Christopher A. Ratcliff
(printed)

18675
Notary or Bar Roll #

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COOPERATIVE AGREEMENT FOR AREA OF CONCERN REMEDIATION OF FORMER MERCURY METER MEASURING STATIONS IN LOUISIANA LDEQ AGENCY INTEREST NO. 149272

****

Signature Page
to the Cooperative Agreement

Know all persons that the undersigned hereby consents and agrees to be bound by the terms of this Cooperative Agreement, to which this signature page is made a part.

By: _____
Mark Houser
President
EnerVest Operating, L.L.C.
1001 Fannin Street
Houston, Texas 77002

WITNESS:

_____ (signature)

CAROL WALLEN (printed)

_____ (signature)

WILLIAM H. PAGE (printed)

SWORN TO AND SUBSCRIBED, before me in the presence of the above witnesses, the undersigned Notary Public, on the 19 day of NOVEMBER, 2007.

_____
Notary Public (signature)

NANCY L. GARDNER (printed)

NANCY L GARDNER
NOTARY PUBLIC, STATE OF TEXAS
MY COMMISSION EXPIRES
MAY 15, 2011

_____
Notary or Bar Roll #

EXHIBIT "1"

Investigation and Remediation Work Plan for Former Mercury Meter Sites

Remediation Work Plan
Former Mercury Meter Measuring Stations

Prepared For

EnerVest Operating Company, LP

Louisiana Department of Environmental Quality
Agency Interest Number

November 20, 2007

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1.0 INTRODUCTION

1.1 BACKGROUND

EverVest Operating LLC (EVO) operates production and gathering facilities in the Monroe Gas Field in northern Louisiana. As a part of these operations, orifice type metering equipment is used to measure volumes of natural gas. The orifice meter equipment utilizes an internal flow restrictive orifice plate that creates a pressure differential across the orifice. A number of the meters historically employed a mercury manometer to measure the volume of natural gas being produced or gathered. Elemental mercury from these meters may have been released by various means potentially impacting the surrounding environment.

EVO plans to perform remediation at historical mercury meter locations identified as having mercury impacts, here forward referred as an Area of Concern (AOC). These AOCs will be addressed under this Remediation Work Plan (RWP). The Louisiana Risk Evaluation and Corrective Action Program (RECAP) non-industrial Screening Option (SO) soil screening standard (SS) of 2.3 milligrams per kilogram (mg/kg) total mercury will be used as the remediation action level (action level) for these AOCs. The remediation effort will be documented using the RECAP reporting format and submitted to the Louisiana Department of Environmental Quality (LDEQ) for No Further Action (NFA) or Certificate of Completion AOC closure. This RWP details the methodologies and procedures for identification, remediation, confirmation sampling, and disposal of the impacted soil. In addition, this RWP details procedures for the reporting of remediation and confirmation sampling activities, and QA/QC methodologies.

1.2 REPORT ORGANIZATION

Section 1.0 of this RWP outlines the work to be performed including the types and selections of sites, remediation objectives and action levels, and scope of work to be performed. Section 2.0 of this RWP presents the project's organization and management systems. Section 3.0 presents the remediation procedures and waste handling while Section 4.0 details sampling and analysis procedures. Section 5.0 discusses non-conformances to the plan and Section 6.0 summarizes health and safety procedures.

1.3 TYPICAL AOC CONFIGURATIONS

The AOCs are typically found in one of four meter run configurations. Each configuration affects the potential dispersion of mercury released to the surrounding environment. The dispersion characteristics are used in determining the likely horizontal and vertical extent of impact.

Configuration #1: Tower Setting

In areas where annual flooding occurs, meters have been placed in towers that are erected to heights of 5 to 35 feet above the ground. These tower AOCs may have a shed enclosure, partial roof or canopy atop of the tower to shelter the meter from direct sunlight and rain.

Configuration #2: Meter Shed with Soil/Gravel

Shelters have been constructed of wood, metal and occasionally brick to protect the metering equipment from the weather and vandalism at many locations. The sheds are typically set directly on the ground and the interior flooring is predominately soil or gravel. Occasionally other flooring materials are encountered such as crushed brick or shells.

Configuration #3: Meter Shed with Concrete Floor
Shelters of similar construction as Configuration #2 (constructed of wood, metal, or brick) but having concrete floors.

Configuration #4: In-Line Meter
In AOCs where flooding or sheltering is not a major consideration, meters are set directly on the gathering line. These meters are typically protected from the weather by either small removable boxes that slide over the meter or by larger boxes that are attached to the gathering line.

1.4 AOC SELECTION

EVO is conducting a search to identify meter locations that formerly employed mercury filled measuring equipment. The search involves employee interviews, site visits, and a review of historical meter records. Identified former mercury meter locations are then evaluated to determine if the site is located in a non-industrial potentially sensitive area. Potentially sensitive areas may include those that are 1) within 500 feet of residences, schools, parks or playgrounds, 2) within 100ft of perennial streams or lakes, 3) adjacent to wetland areas, and 4) located in other non-industrial areas where a high probability of exposure may exist (e.g. heavily trafficked right-of-way's etc.). All sites will be identified through site visits and documented using the "Meter Location Assessment Form" (Appendix A). Once identified, potential sites will be further characterized and classified using the following methodology.

Class I - Visible mercury found at site; site designated an AOC and is scheduled for remediation

Class II - Visible mercury not encountered; collect screening soil samples from directly beneath and around meter or former meter; screening soil samples sent for laboratory analysis to determine if total mercury concentrations exist at the site exceeding the action level. If laboratory results indicate total mercury concentrations exceed the action level then the site is designated an AOC and is scheduled for remediation.

Class III - Visible mercury not encountered; collect screening soil samples from directly beneath and around meter or former meter; screening soil samples sent for laboratory analysis to determine if total mercury concentrations exist at the site exceeding the action level. If action level for total mercury is not exceeded in samples sent for laboratory analysis, site is removed from consideration, no remediation performed.

Any site located in a potentially sensitive non-industrial area that exhibits visible mercury will be designated as an AOC and scheduled for remediation without any further characterization activities. If the visual investigations do not indicate a "positive" mercury impact, then screening soil samples will be collected and shipped for laboratory analysis to determine if site is to be designated as an AOC. Sites exhibiting total mercury concentrations in soil in excess of the 2.2 mg/kg action level for total mercury will be considered impacted, designated as an AOC, and remediated under this Work Plan. Sites that do not exhibit visible mercury and have total mercury concentrations in soil less than the 2.2 mg/kg action level will be removed from consideration for remediation. All site characterization data will be collected and submitted under separate cover (Completion Report) after assessment activities have been completed. The Completion Report will, at a minimum, include the Meter Location Assessment Form (Appendix A), Characterization Data Sheet (Appendix B), location maps, laboratory results,

Chain of Custody documents and laboratory QA/QC reports. The Completion Report may be segregated into multiple reports based on site grouping by geography, year the work was completed, or any other operational criteria determined by EVO to be appropriate for the overall program.

1.5 OBJECTIVES

The overall objective of this program is to perform remedial activities to remove mercury impacted soils located in non-industrial potentially sensitive areas at concentrations exceeding the 2.2 mg/kg total mercury action level. The 2.2-mg/kg action level was selected to correspond to the LaDEQ RECAP non-industrial SO soil screening standard for total mercury. The objectives specific to remediation of mercury impacts at each AOC will focus on the immediate vicinity around each meter and are as follows:

- Excavate soil to a minimum of nine inches below ground surface (bgs) from a pre-defined area based on the configuration of the meter station as described in Sections 1.3, 3.3, and shown schematically in Appendix E.
- Use field screening techniques or sampling to determine whether additional excavation is necessary to achieve the remediation level.
- Continue excavation, if necessary, beyond the pre-defined area to remove remaining mercury impacted soil until the remediation level is achieved.
- Collect and perform laboratory analysis on discrete soil samples to confirm the removal of mercury-impacted soil to concentrations below the remediation level.
- Restore the remediated AOC where necessary so as not to pose a safety or environmental hazard. Restoration may include backfill and / or contouring of excavations. In cases of small excavations or in areas where backfill is not operationally necessary or is impractical, excavations may not be backfilled. All non-backfilled excavations will be completed so as not to pose a safety hazard.

1.6 REMEDIATION ACTION LEVEL

The remediation action level for soil will be to the LaDEQ RECAP non-industrial (SO) soil screening standard of 2.2 mg/kg, total mercury based on EPA Method SW 846-7471 reported on a "as received" basis.

1.7 SCOPE OF WORK

This RWP has been designed with flexibility so that decisions regarding remediation at each AOC can be made as the program evolves and more data becomes available. Confirmation soil sampling and corresponding laboratory analysis for total mercury will document attainment of the remediation action level.

To accomplish the objectives, the program will be performed in two phases: 1) the initial remediation phase, and 2) the confirmation sample phase. A final report will be prepared at the conclusion of remedial activities and upon receipt of all laboratory results in order to document the remediation process and obtain agency closure.

1.7.1 REMEDIATION TASK LIST

- Mobilize field labor and equipment.
- Prepare the AOC for remediation and establish applicable environmental controls.
- Recover visible mercury then remove the soil around the meter equipment based on the AOC configuration.
- Conduct additional soil excavations to remove any remaining mercury impact above the

remediation action level.
- Document and photograph the remedial activities.

1.7.2 CONFIRMATION INVESTIGATION TASK LIST
- Collect soil confirmation samples for laboratory analysis to demonstrate soil remediation action level attainment
- Characterize and dispose of soil generated during the remediation activities.
- Complete AOC restoration as necessary.

2.0 PROJECT ORGANIZATION AND MANAGEMENT

2.1 ORGANIZATION

A project organization chart, which depicts the lines of authority and the reporting structure, is provided in Appendix C. An EVO representative will be responsible for project management and will be responsible for the project direction, final approval regarding technical decisions and interfacing with federal, state and local agencies. EVO will designate a field project manager, who may be a third party contractor, to perform field activities and prepare project documentation.

2.2 PROJECT SCHEDULE

Following approval of the RWP, project activities will be initiated within the time frame agreed to between EVO and LaDEQ. In general, the project will be conducted in the following order:

- Organize the inventory of AOCs into geographic subsets.
- Prioritize the subsets.
- Prepare the remediation schedule and project milestones.
- Determine location(s) to be used as secure central staging areas for excavated soil.
- Mobilize the field crew(s) to the first subset of AOCs.
- Remediate the areal extent of soil impact at each AOC.
- Collect soil confirmation samples for laboratory analysis to confirm that the mercury concentration in the soil at each AOC is below the remediation action level.
- Revisit AOCs requiring additional excavation and collect additional confirmation samples.
- Restore and backfill each AOC with approved clean fill material where necessary.
- Complete waste profiling, transport, and dispose of all waste at an approved facility.
- Prepare the final report documenting the AOC activities, results, and waste disposal and submit for review.
- Mobilize the field crew(s) to the next subset of AOCs and perform remedial activities.
- Assemble reports for each subset of AOCs into a Final Closure Report for submission to LaDEQ.
- Request agency closure (NFA or Certificate of Completion).

3.0 REMEDIATION PROCEDURES

An iterative approach utilizing combinations of visual observation, meter type configurations, and soil screening data will be used to define the areal extent and depth of remedial excavations. In addition, soil vapor data may be used to help define the scope of the remediation. It is anticipated that the excavation of mercury-impacted soil will be adequate to achieve appropriate remediation action levels. Confirmation sampling will be performed following all excavations.

3.1 MOBILIZATION

The field project manager will be responsible for performing AOC preparation activities, mobilization to the work sites and demobilization from the work sites. General work area(s) will be established at the AOCs including ingress/egress routes for vehicles. Mobilization and demobilization will occur on a continuing basis, from AOC to AOC, as the work progresses.

Prior to implementation of remediation activities at an AOC, various support activities must be initiated and completed. Field operations will begin at AOCs only after the required pre-field activities have been completed. Pre-field activities include the following:

- **Approvals and Permits** - Permits and/or approvals that may be required for remediation activities will be obtained prior to performing AOC remediation activities.

- **Transportation and Disposal Facility Arrangements** - The excavated soil and any other material containing mercury will be transported to the proper final disposal facility according to State and Federal regulations by a licensed waste transportation contractor. Due to the small quantity of material expected to be generated at each AOC, the number of AOCs to be remediated and the remote location of most of the AOCs, a "milk run" format for loading and collection of materials will be employed in lieu of individual AOC shipment directly to the disposal facility. Given the fact that none of the excavated soil is anticipated to be hazardous, secure centralized staging areas may be used to gather impacted soil where AOC security and access are potential concerns. Waste transportation paperwork will include the use of the appropriate manifest and documentation system.

- **Notification of Affected Property Owners** – The field project manager will be responsible for notification of property owners (where required) and insuring access to the AOCs. An EVO designated representative may assist the field project manager in the initial contact of these individuals and or entities. If requested, the field project manager will provide the property owners an anticipated schedule of activities and completion dates. The field project manager may provide this information to property owners verbally.

- **Notification of Local Emergency Management Agencies** – Where required, the appropriate emergency agencies will be notified in accordance with all proper Health and Safety procedures.

3.2 AOC CONTROLS

The field project manager will be responsible for control and access to each AOC. The expected levels of mercury vapors in the work areas and the RCRA classification of the waste/soil determine the Work zones established during the remediation phase. Since the work areas are typically well ventilated, the OSHA Permissible Exposure Level (PEL) or 8 hour Time Weighted

Average (TWA) for mercury vapor is rarely exceeded. Additionally, based on profiling data generated for similar wastes during previous remediation activities, elemental mercury impacted soils at metering locations have historically been determined to be RCRA-non-hazardous. Due to these factors and for the purposes of this RWP, all AOC work will initially be considered non-hazardous. A single, verbally defined Work Zone will be established for non-hazardous conditions primarily to prevent the spread of mercury-impacted soil and to restrict access of non-remediation personnel. The field project manager will have the discretion to upgrade the work restrictions or further restrict access if AOC conditions such as elevated mercury vapor levels, Slip and fall hazards, AOC specific restrictions, overhead or underground hazards and/or confined work space conditions exist.

At AOCs where mercury vapor levels exceed the OSHA TWA of 0.10 mg/m^3, the following work zones will be defined:

- **Exclusion Zone** - Remediation activities will take place in this area. Personnel entering or leaving the exclusion zone will do so through the contamination reduction corridor associated with the Contaminated Reduction Zone (CRZ). Personnel will enter and exit the exclusion zone via this designated route and will wear the appropriate personal protective equipment, as specified in the Health and Safety Plan.

- **Contamination Reduction Zone (CRZ)** - Initial decontamination of personnel and equipment will take place in this area. Final decontamination will be performed outside this zone. A specific location for ingress/egress from the support zone to the CRZ will be designated.

- **Support Zone** - this zone will be used to store decontaminated equipment, vehicles, tools, etc. This area will be designated as a clean area.

A detailed Health and Safety Plan will be prepared for remediation activities. General health and safety procedures are summarized in Section 6.0

At times it may be necessary to access or service the AOCs during the remediation, backfilling and/or restoration process. When these activities are required, the work zones will be temporarily modified to allow access. Appropriate Health and Safety controls will be developed and will be implemented if required. Such controls may include: temporarily covering exposed soils, providing wooden planking over excavations or other barriers.

3.3 SOIL REMEDIATION

The remedial method will be soil removal via excavation. Excavated soils will be transported and disposed of in accordance with State and Federal Environmental Regulations.

3.3.1 SOIL EXCAVATION PREPARATION

The impacted soil will be excavated using hand tools, mechanical excavation equipment or a combination of the two methods. The field project manager will select soil excavation methods. Soil excavation method(s) will depend on the size of the area to be excavated and whether the area is restricted with above or below ground piping, metering station structures, active utilities, etc. All excavations will comply with applicable OSHA requirements.

3.3.2 SOIL EXCAVATION

The meter type configuration as introduced in Section 1.3 and illustrated in Appendix E

influences the extent of potential horizontal dispersal of mercury upon its release into the environment. These influences have been used to determine an initial excavation footprint or starting point for the remediation effort. The following describes dimensions and rationale for the initial excavation footprint for each meter type configuration.

Configuration #1 - Towers
The meters are set above the ground to heights of up to 30 feet. Mercury released from these heights has the potential to be dispersed over a larger area due to impact and spattering upon impact with cross beams and surface piping. The splattering effect increases the overall area of impact but also tends to confine the impact to the surficial soils (0-6") in areas other than directly beneath the meter(s). The initial excavation footprint used for Tower configurations is an area 5' x 5' and to a depth of 9" centered beneath the meter and a removal of the first six inches of soil from the remaining area within the interior of the supports.

Configuration # 2 - Meter sheds with soil or gravel floors.
The shed limits the dispersal of mercury to the interior confines of the structure. The most probable pathway away from the shed is via foot traffic through the doorway. The contaminant spread by tracking via the doorway has been found to be predominantly surficial. The initial excavation footprint for meter sheds with soil or gravel floors is an area 5' x 5' and to a depth of 9" bgs centered on the meter inside the building and the removal of 1-3" of soil from a radius extending 18" from the center of the doorway. This footprint is modified for sheds with dimensions of 8' x 8' or greater or for sheds with multiple doorways

Configuration # 3 - Meter sheds with concrete floors.
The shed limits the dispersal of mercury to the interior confines of the structure. The most probable pathway away from the shed is mechanical means (sweeping) or via foot traffic through the doorway. Mercury swept out the doorway tends to be concentrated within a foot of the doorway threshold and surficial within a three-foot radius of the doorway. The initial excavation footprint for meter sheds with concrete floors is removal of 9" of soil from a radius extending 18" from the center of the doorway and 1-3" from a radius extending 18" to 36" from the center of the doorway. This footprint is modified for sheds with multiple doorways or concrete walkways leading to the entrance of the shed. In addition to performing remediation of soils in the doorway area, the interior of the shed will be inspected for free mercury and, if observed, the free mercury will be removed from the shed.

Configuration # 4 - In-line Meters
Potential releases of mercury with this configuration are primarily concentrated directly beneath the meter or orifice flange. The initial excavation footprint for in-line meter AOCs is an area 4' x 4' and to a depth of 9" bgs

3.4 REMEDIATION CONFIRMATION

The actual area of soil excavated will be based on the AOC configuration, data collected from the AOC investigation, and visual observations made during the excavation. In addition, soil vapor data may be used to help define the scope of the remediation. Additional excavation may be required following the results of verification screening and an initial round of confirmation sampling. Remediation will be considered complete when the results of confirmation sampling are below the remediation action level

3.4.1 VERIFICATION SOIL SCREENING

Verification soil screening will be conducted within the excavation boundary to determine if mercury concentrations exceed the remediation level at depths greater than nine inches.

Various methods may be used to determine whether additional excavation is required. A visual inspection of the excavated area for the presence of mercury will be performed at all AOCs.

If mercury is not visibly present the field project manager may elect to perform a HHS field verification test with a MVA. This field screening method consists of collecting discrete soil samples from beneath the meter equipment and from up to four locations along the excavation perimeter. The soil samples are heated to approximately 90 F in a closed container then allowed to cool to ambient temperatures. An air sample is then collected with the MVA and the mercury vapor levels in the sample are measured.

If a HHS soil sample exceeds the field MVA action limit of 0.005 milligrams per cubic meter (mg/m^3) then an additional cut of soil may be excavated from the area where the sample was collected. HHS sampling, screening, and removal will continue using this rational until the soil sample is less than the MVA action limit or excavation has reached a depth of 18 inches bgs.

Due to the limits of the MVA and the HHS field test method the field project manager may elect to forgo this field test method and proceed with confirmation sampling.

All excavation activities will be documented with field measurements that will include excavation, plan dimensions and depths referenced to the original surface grade, photographs of the activities, confirmation sample locations and completion of applicable field forms.

3.4.2 CONFIRMATION SOIL SAMPLES

Confirmation soil sampling will be conducted at each AOC following soil excavation and soil verification screening activities. Soil confirmation samples will be collected as follows:

- A discrete 6" core sample will be collected from the excavation base directly underneath the meter.
- AOC Configuration # 1 & 3 - Four discrete samples will be collected from 1-7 inches bgs equally spaced around the excavation perimeter.
- AOC Configuration # 2 & 4 - One discrete sample will be collected from along each excavation sidewall at the mid point of the ground surface and the excavation base.

If one or more of the discrete soil sample analytical results exceeds the remediation level, additional excavation and confirmation sampling will be performed in the immediate vicinity of the exceedance. These activities may be repeated in the immediate vicinity of the exceedance until the remediation action level has been met. The initial sampling locations for each of the AOC configurations are presented schematically in Appendix E.

3.5 CONDITIONS LIMITING REMEDIATION

Certain conditions may be encountered during remediation that would limit the extent of excavation and/or cause risk-based RECAP Management Options (MO) to be considered for closure. Excavation and sampling will cease and be reevaluated when anyone of the following limiting conditions is encountered:

- **Groundwater** – If groundwater is encountered, excavation will cease and a groundwater sample will be collected and analyzed for mercury using Method 7470 for total mercury in water.

- **Excavation Depth** – An excavation depth of 18 inches below the existing ground surface and confirmation sample results indicating mercury concentrations greater than 2.2 mg/kg

are present. Considerations for Risk-Based RECAP Management Options will be evaluated for closure prior to performing additional remediation and sampling.

- **Operational Considerations** - The various gathering lines to which the metering equipment is attached operates at high pressures and includes a wide variety of underground piping, wiring, conduits, support structures and other equipment. Accordingly, the remediation activities in the vicinity of certain pipeline facilities affected by this investigation and remediation program may need to be modified to ensure the safety of workers or other individuals and/or to protect the integrity of pipeline equipment and facilities.

  At any AOC where field project manager believes that operational considerations exist, a Record of Technical Change form will be completed in accordance with Section 5.0. The nature, location, description and/or any other pertinent information that supports the deviation from the RWP will be recorded on the form. Notification of the change will be submitted to the LaDEQ for review. If the LaDEQ is in agreement with the recommended site specific changes, the Record of Technical Change form will become a part of the Final Report for the AOC affected.

- **More Harm Than Good** - If, in the opinion of the field project manager, the remediation activities would create a situation or condition that environmentally would result in doing "more harm than good", the field project manager will seek the concurrence of the EVO Project Manager and the LaDEQ that further actions will not be taken and that RECAP Management Options for closure be evaluated.

- **Feasibility** - Remediation may be suspended or ceased if conditions encountered make further remediation activities not "feasible". Safety, operational, technical or other conditions may present situations that make remediation impractical, technologically infeasible, cost prohibitive or present operational problems that do not necessarily fall in the "operational considerations" category. The field project manager will contact the EVO project manager and LaDEQ to discuss closure under a RECAP Management Option.

- **Background Levels exceed Remediation Level** – If the naturally occurring background concentration exceeds the remediation action level of 2.2 mg/kg, then the background concentration, as determined using RECAP regulations, will become the new remediation action level. For any AOC where the background concentrations are proposed as the new remediation action level, a sample will be collected to determine the AOC-specific background. A background sample will be collected from non-mercury impacted areas of similar soil type. This sample will be collected in a location as close as practical to the actual AOC while still being a non-mercury impacted location. In these situations the LaDEQ will be notified and a Record of Technical Change form will become a part of the Final Report.

3.6 DECONTAMINATION PROCEDURES

3.6.1 SAMPLING TOOLS

All sampling equipment, other than disposable equipment, which could potentially contact a sample matrix, will be decontaminated prior to use. The decontamination procedures are as follows:

- Wash with potable water.
- Rinse with potable water.
- Allow to air dry.

Fluids and solids generated during tile decontamination of sampling equipment will be bulked

with the excavated soil pending disposal.

3.6.2 EXCAVATION EQUIPMENT

All tools and/or excavating equipment used in the removal of the impacted soil will be decontaminated as follows:

- Scrap or brush to remove any soil adhering to equipment.
- Rinse with potable water.
- Wipe with a clean cloth.
- Allow to air dry.
- Place in an unused mini waste bag until the next use.

3.7 WASTE HANDLING

Excavated soil will be placed into poly extrusion coated mini bags (approximately 0.02 cubic yard bags) and labeled with permanent marker to denote the AOC ID. An initial representative waste profile sample will be collected from excavated soil at the remediation site prior to transport. As no waste is currently anticipated to be classified as hazardous, and in order to ensure security and because of difficult access at some sites, excavated soil will be transferred via field vehicles immediately following remediation from the AOC to a temporary secure staging area prior to the receipt of profile results. However, no waste will be transported to a disposal facility until final results of waste profiling are received.

The mini waste bags will be segregated by AOC ID at the secure staging area and will remain segregated until they are loaded for transport to the disposal facility. Mini waste bags will not, at any time, be commingled or mixed prior to receipt of waste profiling analytical results.

Liquids generated from decontamination of equipment, which can readily be absorbed in the excavated soil without greatly increasing the moisture content of the soil, or modifying the soil disposal profile will be bulked with the excavated soil. Liquids that cannot be readily adsorbed will be containerized in lock ring lid type, 55 gallon DOT rated drums.

If free mercury is collected, it will be containerized for future reclamation.

At a minimum, profiling samples of remediation waste generated under this work plan will be analyzed for soluble mercury content using Method 1311/7470 Toxicity Characteristic Leaching Procedure (TCLP) for mercury. Based on profiling sample analytical results, wastes will be categorized into one of three categories.

3.7.1 CATEGORY 1, NON HAZARDOUS WASTE

Any waste found to contain less than 0.2 mg/l soluble mercury by TCLP Methods will be considered non-hazardous solid waste

Category 1 waste will be transported to an industrial class solid waste landfill or disposed of by other methods that meet federal and state requirements.

3.7.2 CATEGORY 2, HAZARDOUS LOW AND CATEGORY 3, HAZARDOUS HIGH WASTE

Any waste found to contain greater than 0.2 mg/l soluble mercury by TCLP Methods and less than 260 mg/kg total mercury will be classified as Hazardous Waste Low.

Any waste found to contain greater than 0.2 mg/l soluble mercury by TCLP Methods and greater

than 260 mg/kg total mercury will be classified as Hazardous Waste High.
Once at a temporary secure staging area, Category 2 or 3 wastes will be packed in lock ring lid type, 55 gallon DOT rated drums, labeled to denote the hazardous constituent and segregated from the non-hazardous and solid waste. If large quantities are generated duffle top, nylon, water resistant cubic yard bags may be used to load waste into a DOT approved roll off box or 30-yard end dump. The EVO Project manager will immediately be informed as to the specifics of any hazardous waste generation (e.g. type, volume, weight, generation date, etc..) using the Hazardous Waste Generation Notification form located in Appendix F.

The EVO Project Manager will then notify the host facility in order to ensure that all hazardous waste regulatory requirements are met. These requirements and the proposed management strategy for each are presented in the Hazardous Waste Management Matrix in Appendix G.

Where available, existing EVO hazardous waste ID numbers will be used to manifest hazardous waste. If no current number is available for a particular facility, the LDEQ will be contacted and a Temporary Hazardous Waste ID number will be obtained. Where applicable, hazardous waste generated as a result of activities performed under this work plan will be incorporated into the overall EVO waste management program.

Hazardous waste containers will be inspected weekly to ensure competency prior to transportation. On the date of transportation of hazardous waste, a Uniform Hazardous Waste Manifest and Land Disposal Restriction (LDR) Notification document (if applicable) will be prepared, signed by the generator or its designated representative and the licensed hazardous waste transporter. The waste will then be transported to an appropriate Resource Conservation and Recovery Act (RCRA) permitted treatment/storage and disposal (TSD) facility for treatment that meets the UTS and disposal. The RCRA TSD selected will be based on the geographic location of the waste, the waste composition (e.g. solid, liquid, semi-solid), and the quantities generated. The standards applicable to generators of hazardous waste found in 40 CFR 262 Subparts A, B, C and D will be followed and communicated to the EVO Project Manager. Category 3 wastes will be loaded onto transport vehicles for shipment to an authorized retort facility.

3.8 RESTORATION

Each excavation will be restored as necessary to prevent the accumulation of water. Depending on its configuration, backfill of the excavation may be completed following the verification of the remediation action level. All backfill will consist of clean un-impacted soil. The area will be restored, as closely as practical, to the pre-remediation condition. Clean backfill may be stockpiled on site. If necessary, most AOCs will be backfilled within a short time and the stockpile will be small (one to two cubic yards); however, if backfill is left on-site for an extended period of time or if the stockpile is over ten cubic yards, erosion and sedimentation controls will be placed to prevent erosion of the backfill material.

It is the intention to restore all excavations to original grade following remediation. However, situations may develop (i.e. elevated grade excavated to surrounding grade, etc.) where backfill is not operationally necessary. In these situations, with prior approval of LDEQ, backfilling to original grade will not be required. All non-backfilled excavations will be completed so as not to pose a safety hazard.

3.9 REMEDIATION DOCUMENTATION

Documentation of remediation activities will be completed for all AOCs and include all of the

applicable SO submittal requirements outlined in Section 3.3 of the LDEQ RECAP Guidance Document.

AOC remediation activities will be noted by the field personnel on the AOC Remediation Data Sheet (Appendix D), equivalent electronic forms, and / or via handheld computers. The following information will be recorded completed for each AOC:

- A record of remediation activities will be maintained for each AOC. The information will include, but not be limited to, name, location, date, time, climate data, documentation of excavation limitations and sample identification.

- A drawing will be prepared showing the AOC and extent of the excavation, sample locations and identifiers, nearby structures, existing and/or former meter location etc.

- Photographs will be taken of completed excavations.

- Deviations from the RWP, inconsistencies or problems will be noted.

The following items will be included in the final AOC closure report to satisfy the nineteen LDEQ Screening Option submittal requirements:

1. Submittal summary form RECAP Form 1.
2. The site ranking and justification for the ranking.
3. A generic description of the site history and site setting.
4. Topographic map with AOC(s) labeled.
5. A topographical map showing the vicinity of each gas field.
6. An AOC configuration map with significant features.
7. The longitude and latitude of the AOC collected via GPS.
8. Detailed AOC map with sampling locations.
9. Description of the AOC.
10. The land use at each location (listed on the Meter Location Data Sheet).
11. Text documentation that the AOC meets the criteria for screening under SO.
12. Closure sampling data with supporting QA/QC
13. Generic description of the Conceptual Site Model
14. N/A
15. Maximum detected concentration for mercury in soil and analytical data reports.
16. N/A
17. Ecological Risk Assessment Checklist RECAP Form 2.
18. N/A
19. N/A

Submittal requirements (14) and (16) are not applicable to work performed under this work plan. Requirements (18) & (19) are not applicable as long as the SO is elected. Therefore, submittal requirements (14), (16), (18), and (19) will not be provided in the final closure report.

3.10 PHOTOGRAPHIC RECORD

Photographs will document representative remediation activities wherever appropriate. Additionally a photograph of the open excavation at each AOC will be taken.

4.0 CONFIRMATION SAMPLING

To ensure that the confirmation sample analytical results are representative of the conditions present at each AOC, the sampling procedures outlined in this section will be used. Sampling procedures may be modified based on actual field conditions encountered. Any modifications will be described in detail and be included in the final report.

4.1 SOIL SAMPLES

The number and locations of confirmation soil samples will be based on the configuration of the meter station pursuant to Section 1.3. The sampling protocol for each configuration is detailed in Section 3.4.2 and shown schematically in Appendix E. The actual sample locations will be established in the field at the time of sampling. Prior to collection, each soil sample will be identified in accordance with a sample identification system, which will be developed and reviewed, with each field crewmember prior to the start of field activities. A description of all sample point locations will be documented.

Discrete soil samples will be collected at specified locations that will extend from the excavated surface to a depth of approximately 6 inches. Any loose gravel, vegetation, or other incidental surface material will be cleared from the sample location prior to sample collection.

All samples will be placed into a clean glass or plastic sample container labeled with a unique identifier then placed in a cooler until shipment for laboratory analysis.

All sample equipment will be decontaminated prior to each use by the method described in this section.

Chain-of-custody procedures for the samples will be strictly observed.

4.2 SAMPLE HANDLING AND DOCUMENTATION

4.2.1 CONFIRMATION SAMPLE LABORATORY ACCREDITATION

Laboratories that are accredited, or are listed as accepting data while pending accreditation, by the Louisiana Department of Environmental Quality, will analyze all samples.

4.2.2 SAMPLE IDENTIFICATION AND LABELING

Samples taken in the field will be identified with a sample label affixed to the sample container. Sample labels will be completed with waterproof ink and must include the following at a minimum:

- Sample identification number.
- Date and time of collection.
- Name/initials of the collector.

4.2.3 CHAIN OF CUSTODY RECORD

A chain of custody record will be maintained for all samples submitted to the laboratory during this project. This record will also designate the laboratory destination. A chain-of-custody record will be completed for all samples to be shipped off site. Possession of samples collected or prepared in the field must be accountable from the time collected/prepared until disposal. Chain of custody records will be used to document transfer of sample custody. A sample is in custody if it meets the following criteria:

- In someone's physical possession.
- Maintained in view, after being in possession.
- Physical possession and then transferred to a designated secure area and/or forwarded to an express delivery firm.

When transferring the possession of samples, the individuals relinquishing and receiving possession will sign, date, and note the time on the record. This record documents sample custody transfer from the sampler, usually through another person or persons, to the analytical laboratory

.

4.2.4 SAMPLING DOCUMENTATION

Documentation for sample collection and handling include:

- Chain of custody record will be maintained for samples collected during this project. This record will designate the laboratory destination and will be completed for each sample to be shipped off site.
- All documents and data required under the RECAP SO will be included in the final report.

4.2.5 SAMPLE ANALYTICAL RESULTS REPORTING

Sample analytical results will be provided in the final report from the standard laboratory data report package. The standard laboratory data report package will include at a minimum:

- Client name and address.
- Client sample identifier.
- Analytical laboratory sample number.
- Date the sample was collected.
- Date the sample was received at the laboratory.
- Date the sample was analyzed.
- Analytical laboratory reporting limit for each analyte.
- EPA method used for the analysis.
- Concentration of each target analyte in the sample.
- Units used for expressing of the analyte concentrations.
- Initials of the analyst performing the test.
- Percent recovery of surrogate compounds (organics only).
- QC batch identifier.
- Results for the method blank sample analysis.
- Percent recoveries obtained for laboratory control sample analysis.
- Percent recoveries obtained for analysis of the matrix spike (all tests) and matrix spike duplicate (organic tests only) samples.
- Result obtained for duplicate sample analyses (inorganic test parameters).
- Relative percent difference between the analyte recoveries in the MS and MSD samples (organic analyses) or duplicate samples (inorganic analyses).
- Analysis footnotes that qualify analysis data or provide additional information related to the chemical analysis.
- Report date.
- Quality control data including: method blank, laboratory control sample (% recovery), matrix spike (% recovery), duplicate or matrix spike duplicate (relative percent difference-RPD), and surrogate spikes (% recovery).
- Any anomalies that are encountered during the analysis will also be reported.

4.3 QUALITY ASSURANCE / QUALITY CONTROL PROCEDURES

To help ensure the validity of the analytical results, a Quality Assurance/Quality Control (QA/QC) program will be implemented for the confirmation sampling. The program has established control limits that will be utilized to detect anomalous data that may require corrective action. The accuracy and precision of the analyses will be monitored by the analysis of both field and laboratory QC samples.

The physical state of the elemental mercury in combination with the sample matrix that will likely consist of soil composed of clays, silts, and sands and with various amounts of gravel sized rock fragments, will limit the ability to produce a perfectly homogenous sample. Because of sample heterogeneity and the potential for matrix interference, variation in analytical results including data outside established method QA/QC criteria may occur. All data outside established method QA/QC criteria will be evaluated for usability. All data determined usable will be considered in determining the attainment of the 2.2 mg/kg remediation action level for total mercury.

4.3.1 FIELD DUPLICATE SAMPLES

Field duplicate or split samples will be collected and analyzed as a measure of the analytical precision. Duplicate samples will be prepared by dividing the original sample into a separate aliquot. Duplicate samples will be collected at the rate of one field duplicate per 20 soil samples. The duplicate samples will be identified with a unique sample number and submitted to the laboratory.

4.3.2 SPLIT SAMPLING

The LaDEQ may on occasion request split samples on any and all samples collected. Analytical results of the LaDEQ sample(s) will be used for QA/QC purposes only.

4.3.3 DATA VALIDATION

Data validation will be performed and includes a systematic technical review of the laboratory analytical data. Data presented on the certificate of analysis and quality control summary will be inspected for adherence to method QA/QC criteria, accuracy, precision, and completeness. If the data does not meet the method QA/QC criteria, a determination will be made concerning the usability the data for the project. All data determined usable will be considered for attainment of remediation action levels and subsequent AOC closure.

4.4 ANALYTICAL PROCEDURES

A certified analytical laboratory contracted by field project manager will analyze all samples collected during the remediation at AOCs. The contract analytical laboratory will analyze each sample in accordance with the 'Test Methods for Evaluating- Solid Waste. Physical/Chemical Methods (U.S. EPA SW-846)", Third Edition. The specific methods for analysis are as follows:

- Method 7471 for total mercury in soil.
- Method 7470 for total mercury in water.
- Method 1311/7470 for the Toxicity Characteristic Leaching Procedure (TCLP) mercury.

All results will be reported on an "as received" basis. Details of the Quality Assurance Procedures employed at the contract laboratory are documented in the laboratory Quality Assurance Manual, and are available upon request.

5.0 NONCONFORMANCES AND CORRECTIVE ACTION

During the remediation, inconsistencies or problems that arise will be noted. A letter documenting the problem(s) and the method(s) and schedule proposed for implementing corrective actions will be submitted to the EVO Project Manager. If the problem is minor in scope such as with equipment and personnel decontamination, the decision concerning the procedure to follow will be made in the field by qualified personnel. When a more significant problem occurs or where changed or unanticipated conditions warrant a scope modification, the field personnel will notify the EVO Project Manager within 24 hours.

Revisions to the RWP may be required for operational considerations or scope of work changes. Revisions will be recorded in written form to and provided to affected parties.

6.0 HEALTH AND SAFETY

A Health and Safety Plan for remediation activities will be prepared in accordance with this section and the most recent Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), and the National Institute for Occupational Safety and Health (NIOSH) regulations and guidelines. Specifically, the following reference sources will be used as a minimum in formulating the Health and Safety plan:

- OSHA 29 CFR 1910.
- OSHA/NIOSH/EPA United States Coast Guard "Occupational Health and Safety Guidelines for Activities at Hazardous Waste Sites".
- NIOSH Pocket Guide to Chemical Hazards.

The field project manager will prepare the Health and Safety plan. The Health and Safety plan and will address:

- Responsibilities of personnel.
- Personal protective equipment requirements.
- AOC controls and monitoring.
- Personnel and equipment decontamination procedures.
- Emergency procedures and spill response and control procedures.
- Job hazards and hazard control.

Each day the field personnel will conduct a safety awareness meeting. All field personnel involved with the AOC remediation activities will participate in the meeting and a Tailgate Safety Meeting Form or equivalent will be prepared. Additionally, the consultant / contractor's Corporate Safety Officer, Project Manager, and Field Team Leaders may conduct safety inspections during any task. Unsafe equipment or unsafe acts by project personnel will be noted and corrective actions will be implemented and documented.

Appendix A
Meter Location Assessment Form

Meter Location Assessment Form

Date: Location Name or Number

Parish or County: Township-Range-Section T - R - S

Latitude / Longitude

Residence or Building within 500 ft?	Y	N
Is this building a school, nursing home or day care center?	Y	N
Stream, Lake or water body within 100 ft.?	Y	N
Recreation Area (park, playground, etc.) within 500 ft.?	Y	N
Is the property on State or Federal Land?	Y	N
Does the Location flood periodically?	Y	N
Is the property located in or adjacent to a wetland?	Y	N

Type of Meter shelter configuration?

Shed Tower In-line Box None

(If meter shed is present answer the following)

Meter Shed construction type	Wood	Metal	Brick
Meter Shed Floor type	Wood	Concrete	Gravel/Dirt

Size of shed

Was there ever a meter shed or tower used at the location?	Y	N
If "yes" which type?	Shed	Tower

When was it removed?

Was the meter relocated when the shed or tower was removed? Y N

Meter Location Assessment Form (cont.)

Is mercury visibly present at this location?	Y	N
Does access to the location require a key	Y	N
Does access to the location require a special escort Or permission to enter (i.e. Industrial facility)?	Y	N
Does access to this site require a 4-wheel drive vehicle?	Y	N

The site is accessible for how many months per year?	1 -5	6-10	12	
Circle the month(s) when access is best	J F M A M J J A S O N D			
How many meters are in used at this location?	1	2	3	4 5+
Type of meter(s) currently in use	Mercury	Dry-Flow		

Is this the original setting for the meter?	Y	N
If "No" do you have knowledge of its former location?	Y	N
Is this a master meter setting?	Y	N
If "yes" were the wells originally metered elsewhere?	Y	N

Comments:

Assessment Information Provided by:

Appendix B
Characterization Data Sheet

Characterization Data Sheet
Location # _____

Assessment Summary

Assessment date:	AOC Name:
AOC assessed by:	Site Rank

AOC Characteristics

Lat/Long:	Land Use:	Type of meter(s):
Township-Range-Section	Population w/i 500 ft.?	Shelter Configuration:
Parish:	Bldg w/i 500 ft?	Active meter site:
Quad:	Water body w/i 100 ft?	Road accessible:

Analytical Results

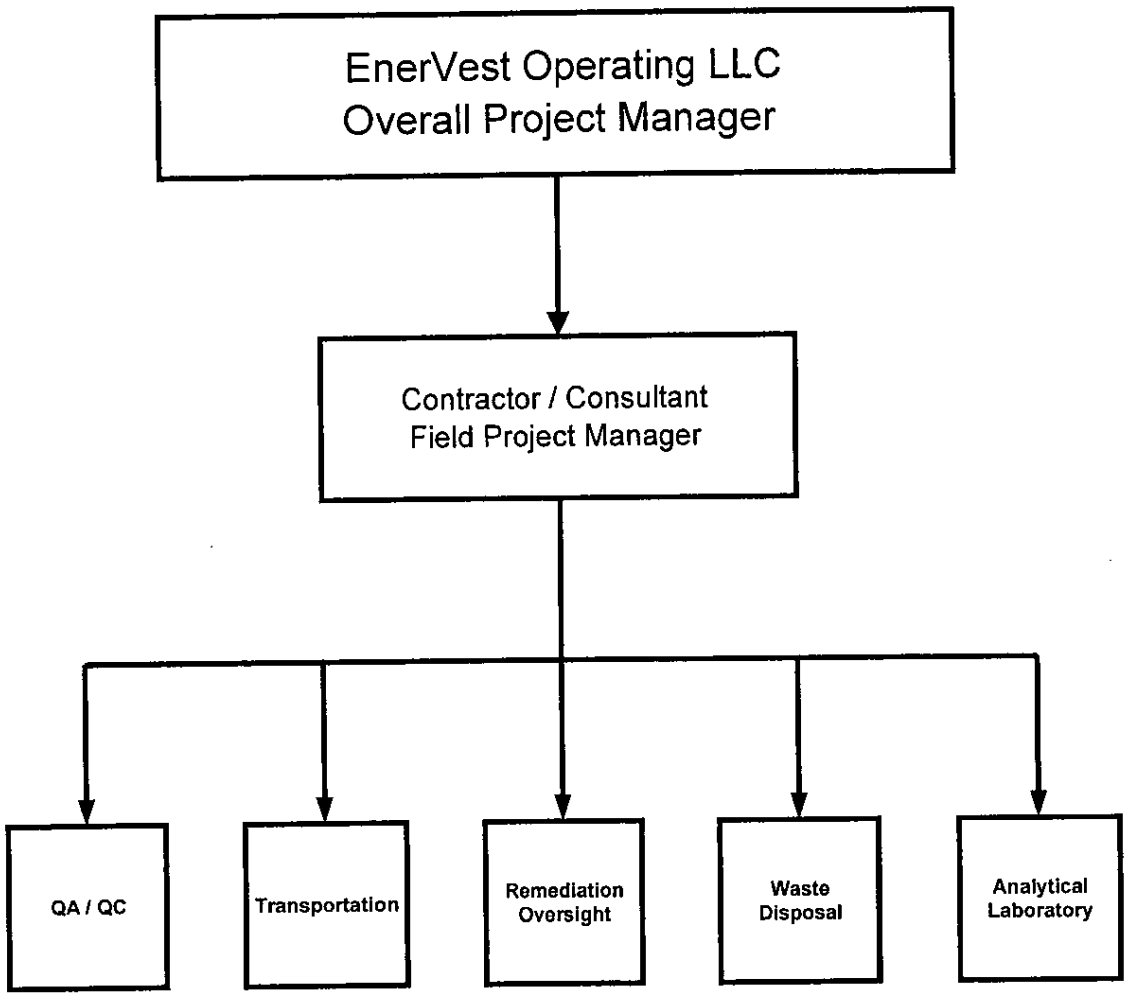
Total Hg (mg/kg) Grab:	Total Hg (mg/kg) Composite;

Discussion of Deviations from Standard Assessment Procedures:

Recommendations:

Appendix C
Organizational Chart

Former Mercury Meter Measuring Stations
Project Organizational Structure



Appendix D
Remediation Data Sheet

Remediation Data Sheet
AOC # _____

Remediation Summary

Volume removed:	# of mini bags used:	AOC revisit (#):
Maximum Depth:	Debris removed:	Secure Staging location:
Free mercury encountered:	Groundwater present:	Operational Constraints:

Start date:	Final Revisit date:
Arrival time:	# of revisit samples collected:
Departure time:	Revisit Base:
Weather:	Revisit Sidewall:
Crew Leader:	Crew Leader:

AOC Characteristics

Location Name or Number:	: Lat/Long	Land Use: Site Rank
Parish:	Shelter Config.	Building w/i 100ft?
Quad:	Shelter Size	Water Body w/i 100 ft.?:

Final Analytical Results

Total Hg base (mg/kg):	Total Hg Sidewall 1 (mg/kg):	Total Hg Sidewall 2 (mg/kg):
Total Hg Sidewall 3 (mg/kg):	Total Hg Sidewall 4 (mg/kg):	Waste ProfileTCLP Hg (mg/l):

Background (if analyzed) (mg/kg):

Discussion of Deviations from Standard Remediation Procedures:

Appendix E
AOC Sample Location Configurations 1 - 4

Appendix F
Hazardous Waste Generation Notification Form

HAZARDOUS WASTE GENERATION NOTIFICATION

General Information

Notification Date: _____
Generation / Accumulation Start Date:_____
Accumulation Expiration Date: _____
Hazardous Constituent: _____
Physical State: _____
Container Type: _____
Volume: _____
Weight: _____

Waste Classification

Conditionally Exempt Small Quantity Generator (CESG) *< or = to 220 lbs / month*	
Small Quantity Generator (SQG) *Between 220 - 2,200 lbs / month*	
Large Quantity Generator (LQG) *> 2,220 lbs / month*	

Location of Waste Container(s): _____
Hazardous Waste ID Number of Location:_____

Analytical Information

Laboratory:_____

Analyses Performed:	Date:	Results:

Additional Comments

Appendix G
Hazardous Waste Management Matrix

Regulatory Requirements	Conditionally Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)	Proposed Waste Management Action
Quantity Limits	≤ 220 lb./month ≤ 2.2 lb. acute ≤ 220 lb. acute residue §261.5(a) and (e)	Between 220-2,200 lb./month ≤ 2.2 lb. acute §262.34(d)	≥ 2,200 lb./month > 2.2 lb./month acute §261.5(e) & Part 262	All waste determined to be hazardous will be quantified for volume and weight. Hazardous waste will be managed as CESQG, SQG, or LQG depending on weight.
Make Hazardous Waste Determination	Required §262.11	Required §262.11	Required §262.11	All waste will be profiled for mercury using TCLP methods. Any waste exceeding 0.2 mg/l soluble mercury (TCLP) will be managed as hazardous following receipt of analysis.
EPA ID Number	Not Required §261.5	Required §262.12	Required §262.12	Existing EVO ID number will be utilized where available for a facility. If no EVO number is available, a temporary number will be obtained for a facility if volume exceeds CESQG limit.
On-Site Accumulation Quantity	≤ 2,200 lb. ≤ 2.2 lb. acute ≤ 220 lb. spill residue (if exceeded, becomes SQG) §261.5(f)(2) and (g)(2)	≤ 13,200 lb. (if exceeded, need RCRA storage permit) §261.34(d)(1)	No Limit	Accumulation of all waste determined to be hazardous will be consistent with CESQG, SQG, and LQG requirements.
Accumulation Time Limits	None §261.5	≤ 180 days or ≤ 270 days (if waste must be shipped over 200 miles) §261.34(d) and (e)	≤ 90 days §261.34(a)	All waste determined to be hazardous and below the SQG threshold will be shipped within 180 days of generation. All waste determined to be hazardous above the SQG threshold will be shipped within 90 days of generation per the LQG requirements. Generation dates will be tracked for all hazardous waste.
Storage Requirements	None §261.5	Basic 40 CFR 265 Subparts I and J technical standards for tanks and containers §262.34(d)(2) and (3)	Full compliance with 40 CFR 265 Subparts I,J,W,DD requirements for containers, tanks, drip pads and containment buildings respectively (except §265.197(c) and 265.200 for tanks) §262.34(a)	All waste determined to be hazardous waste will be properly containerized in 55 gallon DOT rated drums or, if large quantities of soil are generated, in duffle top nylon, water resistant cubic yard bags loaded into DOT approved roll off boxes or similar for shipment to the disposal facility. Containerized waste determined to be hazardous and exceeding CESQG amounts will meet the following: • Will be stored in a designated hazardous waste storage area of the facility. • Not be stored nearby other incompatible waste. • Will be labeled as hazardous • Will be closed during storage • Will be inspected weekly during storage with a log kept that includes date and time of inspection, inspector name, observations made, and corrective actions (if any). Inspections logs will be retained for three years.
Use Transporter with EPA ID Number	Not Required §261.5 (f) and (g)	Required §262.12 (c)	Required §262.12 (c)	Only licensed hazardous waste transporter s with the appropriate EPA ID numbers will be used to transport waste determined to be hazardous.
Off-site Management	State approved or RCRA permitted / interim status facility §261.5(f)(3) and (g) (3)	RCRA permitted / interim status facility §262.20(b)	RCRA permitted / interim status facility §262.20(b)	Only RCRA permitted TSD facilities that meet UTS and disposal requirements for mercury-impacted hazardous waste will be utilized for disposal of waste determined to be hazardous.
Manifest	Not Required §261.5	Required §262.20	Required §262.20	All waste determined to be hazardous exceeding the CESQG threshold will be manifested including all appropriate LDR documents. Trained EVO personnel or designated trained representatives will sign manifests.
Subject to Land Disposal Restrictions (LDR)	No §268.1(e)	Yes §268.1(b)	Yes §268.1(b)	LDR requirements will be met for any wastes determined to be hazardous exceeding the CESQG threshold.

Regulatory Requirements	Conditionally Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)	Proposed Waste Management Action
Annual Report (Louisiana requirement)	Not Required §261.5	Not Required §262.44	Required §262.41	If LQG status applies, a report will be prepared and submitted by EVO pursuant to the reporting requirements. Waste generated from this work plan may be included in the EVO facility report if already an LQG facility.
Waste Minimization Plan (Louisiana requirement)	No	No SQGs only need a Waste Certification on Manifest	Yes LAC 33:V.2245.K	EVO waste minimization plan will be used where EVO facility is a LQG. If EVO facility does not have a waste minimization plan, IETC will prepare a waste minimization plan for the facility during the month the identified hazardous waste is generated.
Personnel Training	Not Required §261.5	Basic training required §262.34(d)(5)(iii)	Required §262.34(a)(4)	EVO trained personnel will be used for managing identified hazardous waste pending disposal. If no EVO trained personnel are available, IETC personnel will be trained and will manage identified hazardous waste during the month the waste is generated.
Contingency Plan	Not Required §261.5	Basic plan §262.34(d)(5)(i)	Full Plan required §262.34(a)(4)	EVO contingency plans (where EVO facility is LQG) will be used for identified hazardous waste generated under this work plan. If EVO facility does not have a contingency plan, IETC will prepare a contingency plan for the facility during the month the identified hazardous waste is generated.
Emergency Procedures	Not Required §261.5	Required §262.34(d)(5)(iv)	Required §262.34(a)(4)	All EVO facilities have emergency procedures in place. EVO emergency procedures will be adopted and applied for identified hazardous waste generated under this work plan.
DOT Transport Requirements	Yes (as required by DOT)	Yes §262.30-262.33	Yes §262.30-262.33	Hazardous waste transporters currently used by EVO will be used for identified hazardous waste generated under this work plan wherever possible. Only waste transporters that comply with the HMRs will be used for shipping of identified hazardous waste generated under this work plan.

EXHIBIT "2"

Monroe Field
Mercury Meter Procedures

EnerVest Operating, L.L.C.

MONROE FIELD
MERCURY METER PROCEDURES

ENERVEST

MONROE FIELD
MERCURY METER PROCEDURES

Contents

1. Assess all EnerVest owned meter sites.
2. Procedures to follow if any visible Mercury found.
3. Procedures to remove mercury meters in Monroe Field.
4. Meter Decommissioning.

ENERVEST

MONROE FIELD
MERCURY METER PROCEDURES

1. Assess all EnerVest owned meter sites.

A. EnerVest inspects all meter sites monthly.

B. Any sites identified that have or had mercury meters will be documented.

C. Survey received from field would be incorporated into a database to document all mercury sites.

2. Procedures to follow if any visible mercury found.

A. Check meter for any leakage.

1. If leaking, meter will be pulled or repaired.

B. Whenever visible mercury is found, EnerVest employees will vacuum or scoop up all visible mercury and put into a five gallon plastic bucket with lid. Mercury will then be transported to the containment area.

ENERVEST

MONROE FIELD
MERCURY METER PROCEDURES

3. Procedures to remove mercury meters in Monroe Field.

A. Place plastic sheeting 6x6x6 mil under meter.

B. Plastic container placed under meter 3x3x2.

C. Close all valves.

D. Remove supply lines.

E. All openings plugged with steel plugs.

F. Loosen meter, saddle and remove stand pipe / meter.

G. Meter is placed in container for removal.

H. Transport to containment area.

ENERVEST

MONROE FIELD
MERCURY METER PROCEDURES

4. Meter Decommissioning.

A. After the meters containers have been transported and placed in the containment area, the decommissioning crew will segregate the meter containers with standpipes from the meter containers without standpipes.

B. The meter containers with the standpipe still attached will then be placed horizontally on the containment structure and disassembled using large pipe wrenches. The meter containers without standpipes will be placed directly into the containment area.

C. The meter chart boxes will be removed. The removed chart boxes and any detached standpipes not in contact with elemental mercury will be moved outside of the containment area and placed in an area designated for solid waste.

D. Any metal material in contact with elemental mercury will be washed, or have the mercury removed through other physical methods (e.g. banging on metal piping with a hammer), and recycled as scrap metal.

E. The meter container will be placed vertically on a work stand where the decommissioning crew will open the meter container by removing the cover bolts to with air impact tools. Once the covers are removed, the elemental mercury will be recovered from the meter container by pouring into a five-gallon plastic bucket where it will be decanted prior to placement into the shipping flask.

F. Once decanted, the elemental mercury will be poured via a long neck metal funnel into the opening of the cast iron mercury-shipping flask. All recovered elemental mercury will be sent to a facility for recycling.

G. A wash solution of Hg-X and water will be prepared in a twenty-five gallon container located in the containment structure. An additional quantity of rinse solution of Hg-X and water will be prepared in a five-gallon hand pumped sprayer.

4. Meter Decommissioning Cont'd.

H. All empty meter containers, and any metal parts that have been in contact with elemental mercury, will be washed and tripled rinsed with the wash solution. The washing of the empty meter containers and other metal will be accomplished by spraying the interior surfaces to remove any residual mercury adhering to the interior components or surfaces. The wash solution, if used, and any entrained mercury, will be captured and be periodically decanted to remove any mercury accumulations.

I. The empty meter container will then be completely submerged twice in a dilute solution of Hg-X and water then visually inspected to ensure that mercury is not present prior moving the meter container from the containment area to the scrap metal recycling container.

J. All empty and washed / cleaned mercury containers will be bulked and containerized for recycling as scrap metal.

K. Elemental mercury will be decanted from wash liquids and recovered for recycling. All wash liquid will be sampled for TCLP mercury following recovery of elemental mercury. Wash liquid testing negative for TCLP will be handled as solid waste. Wash liquid testing positive for TCLP will be handled as hazardous waste.